This listing of claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS

1.   (Currently Amended) A wireless Local Area Network (WLAN), comprising:
        an access point for communicating with a plurality of mobile stations; and
        an interworking function within the WLAN, coupled between the access point and a selected Public Land Mobile Network (PLMN), via an inter-PLMN backbone, the interworking function of the WLAN enabling communications between the selected PLMN and the WLAN wherein the WLAN appears as another PLMN to the selected PLMN, and wherein the interworking function of the WLAN enables communications with a Serving General Packet Radio Service Support Node (SGSN) of the selected PLMN using a Gp interface coupled between the interworking function and the inter-PLMN backbone.

2.   (Cancelled)

3.   (Original) The WLAN according to claim 2, wherein the interworking function performs the functions of a logical Serving General Packet Radio Service (GPRS) Support Node (SGSN).

4.   (Original) The WLAN according to claim 3, wherein the interworking function is viewed by the selected PLMN as an SGSN in another UMTS/GPRS PLMN.

5.   (Original) The WLAN according to claim 1, wherein the selected PLMN includes Session Management/GPRS mobility management (SM/GMM) procedures, which are reused in the WLAN by the use of an adaptation layer in a mobile dual-protocol stack and in the IWF to WLAN interface to mimic the functionality of a Radio Resource Control (RRC) protocol sub-layer.

6.   (Original) The WLAN according to claim 1, wherein the interworking function utilizes a GPRS tunneling protocol between a GGSN and the interworking function for downlink traffic coming from the GGSN to reduce UMTS traffic, and provides a common Internet access to all users for all other traffic to reduce the traffic between the interworking function and the GGSN.

7.   (Original) The WLAN according to claim 1, wherein the selected PLMN comprises a Universal Mobile Telecommunications System (UMTS) network.

8.   (Currently Amended) A method for communicating with a selected Public Land Mobile Network (PLMN) via a wireless Local Area Network (WLAN), comprising the steps of:
        connecting the WLAN to a Serving General Packet Radio Service Support Node (SGSN) of the selected PLMN through an inter-PLMN interface using a Gp interface coupled between the WLAN and the inter-PLMN interface; and
        providing an interworking function within the WLAN, which communicates with the inter-PLMN interface to convert protocols between the WLAN and the selected PLMN wherein communications from the WLAN to the selected PLMN appear to be from another PLMN, and communications from the selected PLMN to the WLAN appear to be from within the WLAN.

9.   (Cancelled)

10.   (Original) The method according to claim 8, wherein the providing step comprises providing an interworking function that mimics the functions of a Serving General Packet Radio Service (GPRS) Support Node (SGSN).

11.   (Original) The method according to claim 8, further comprising utilizing a
GPRS tunneling protocol between a GGSN and the interworking function for downlink
traffic coming from the GGSN to reduce traffic on the selected PLMN.

12.   (Original) The method according to claim 8, further comprising an adaptation
layer in a mobile dual-protocol stack in the interworking to WLAN interface to mimic
the functionality of a Radio Resource Control (RRC) protocol sub-layer, whereby the
session management/GPRS mobility management (SM/GMM) procedures are reused in
the WLAN.

13.   (Currently Amended) A method for communicating with a mobile station and a
selected Public Land Mobile Network (PLMN) in a wireless Local Area Network
(WLAN), comprising the steps of:
        broadcasting a routing area identifier;
        receiving a routing area update request from the mobile station that enters into a
coverage area of the WLAN in response to the broadcast;
        transmitting the routing area update request to a Serving General Packet Radio
Service Support Node (SGSN) of a selected PLMN, via an inter-PLMN backbone using
a Gp interface of an interworking function within the WLAN, the Gp interface being
coupled between the interworking function and the inter-PLMN backbone, wherein the
WLAN appears as a logical PLMN to the selected PLMN; and
        receiving a context response from the SGSN via the inter-PLMN backbone.

14.   (Original) The method according to claim 13, wherein the selected PLMN
comprises a Universal Mobile Telecommunications System (UMTS) network.

15.   (Original) The method according to claim 13, further comprising the step of
providing an interworking function that mimics the functions of a Serving GPRS
Support Node (SGSN) such that the WLAN appears as another PLMN to the selected
PLMN.